

**IN THE CLAIMS**

Please amend the claims as follows.

1. (Original) Pair of oligonucleotides, for use as a set in the amplification of a target sequence of the genome of SARS Coronavirus, said pair consisting of:

a first oligonucleotide being 10-50 nucleotides in length and comprising at least a fragment of 10 nucleotides of:

SEQ ID 1: TACCTCTCCA GCTAGGATT TCTACAGGTG TTAACCTAGT  
AGCTGTACCG ACTGGTTATG TTGACACTGA AAATAACACA GAATTCACCA  
GAGTTAATGC AAAACCTCCA CCAGGTGACC AGTTAAACA TCTT,

SEQ ID 14: TCAGCCCCAG ATGGTACTTC TATTACCTAG GAACTGGCCC  
AGAAGCTTCA CTT,  
SEQ ID 23: TGCTCCAAGT GCCTCTGCAT TCTTGGAAT GTCACGCATT  
GGCATGGAAG TCACACCTT, or  
SEQ ID 31: TGCCTATATG GAAGAGCCCT AATGTGTAAA ATTAATTTA  
GTAGTGCTAT CCCCATGTGA TTTAATAGC TT, or the complementary sequence thereof,

a second oligonucleotide being 10-50 nucleotides in length and comprising at least a fragment of 10 nucleotides of:

SEQ ID 2: ATGAATTACC AAGTCAATGG TTACCTTAAT ATGTTATCA  
CCCGCGAAGA AGCTATTCGT CACGTTCGTG CGTGGATTGG CTTTGATGT,  
SEQ ID 17: AGGTTACCC AATAATACTG CGTCTGGTT CACAGCTCTC  
ACTCAGCATG GCAAGGAGGA ACTTAGATT CCTCGAGGCC AGGGCGTTCC  
AATCAACACC AATAGTGGTC CAGATGACCA AAT,

SEQ ID 26: CCAAACGTGC ACTAAGAAAT CTGCTGCTGA GGCATCTAAA  
AAGCCTCGCC AAAAACGTAC TGCCACAAAA CAGTACAACG TCACTCAAGC  
ATTTGGGAGA CGTGGTCCAG AACAAACCCA AGGAAATT, or

SEQ ID 34: TACGATACAT AGTCTACTCT TGTGCAGAAT GAATTCTCGT  
AACTAACAG CACAAGTAGG TTTAGTTAAC TTTAATCTCA CATAGCAATC  
TTTAATCAAT GT,  
or the complementary sequence thereof.

2. (Currently Amended) Pair of oligonucleotides, according to claim 1, consisting essentially of:

a first oligonucleotide comprising, at least a fragment of 10 nucleotides, of a sequence selected from the group consisting of:

SEQ ID 3: TCCACCAGGT GACCAGTTA AACATCTT,  
SEQ ID 4: TAGTAGCTGT ACCGACTGGT TATGTT,  
SEQ ID 5: TACCTCTCCA GCTAGGATT TCT,  
SEQ ID 15 : TCAGCCCCAG ATGGTACTTC T,  
SEQ ID 16 : TAGGAACTGG CCCAGAAGCT TCACCT,  
SEQ ID 24 : TGCTCCAAGT GCCTCTGCAT TCTT,  
SEQ ID 25 : TTGGCATGGA AGTCACACCT T,  
SEQ ID 32 : TGCCTATATG GAAGAGCCC,  
SEQ ID 33 : TCCCCATGTG ATTTAATAG CTT,  
or the complementary sequence thereof, and

a second oligonucleotide comprising, at least a fragment of 10 nucleotides, of a sequence selected from the group consisting of:

SEQ ID 6: ATGAATTACC AAGTCAATGG TTAC,  
~~SEQ ID 7: GAAGCTATTC GTCACGTTCG,~~  
SEQ ID 8: TCGTGGATT GGCTTGATG T,  
SEQ ID 18 : AGGTTACCC AATAATACTG CGT,  
SEQ ID 19 : AGATCCCTC GAGGCCAGGG CGT,  
SEQ ID 20 : ATAGGGTCC AGATGACCAA AT,  
SEQ ID 27 : CCAAACGTGTC ACTAAGAAAT CTGCT,

~~SEQ ID 28~~ : CTCAAGCATT TGGGAGACGT GGT,  
SEQ ID 29 : CAGAACAAAC CCAAGGAAAT T,  
SEQ ID 35 : TACGATACAT AGTCTACTCT TGT,  
~~SEQ ID 36~~ : TAACTAAACA GCACAAGTAG GT,  
SEQ ID 37 : TAGCAATCTT TAATCAATGT,  
or the complementary sequence thereof.

3. (Original) Pair of oligonucleotides, for use as a set in the amplification of a target sequence located within the replicase gene of the genome of SARS Coronavirus, said pair consisting of:

a first oligonucleotide being 10-50 nucleotides in length and comprising at least a fragment of 10 nucleotides of: SEQ ID 1: TACCTCTCCA GCTAGGATT TCTACAGGTG TTAACCTAGT AGCTGTACCG ACTGGTTATG TTGACACTGA AAATAACACA GAATTCACCA GAGTTAATGC AAAACCTCCA CCAGGTGACC AGTTAAACA TCTT, or the complementary sequence thereof, and

a second oligonucleotide being 10-50 nucleotides in length and comprising at least a fragment of 10 nucleotides of: SEQ ID 2: ATGAATTACC AAGTCAATGG TTACCTAAAT ATGTTTATCA CCCGCGAAGA AGCTATTCGT CACGTTCGTG CGTGGATTGG CTTTGATGT, or the complementary sequence thereof.

4. (Original) Pair of oligonucleotides, according to claim 3, consisting essentially of:

a first oligonucleotide comprising at least a fragment of 10 nucleotides of a sequence selected from the group consisting of:  
SEQ ID 3: TCCACCAGGT GACCAGTTA AACATCTT,  
SEQ ID 4: TAGTAGCTGT ACCGACTGGT TATGTT,  
SEQ ID 5: TACCTCTCCA GCTAGGATT TCT,  
or the complementary sequence thereof, and

a second oligonucleotide comprising at least a fragment of 10 nucleotides of a sequence selected from the group consisting of:

SEQ ID 6: ATGAATTACC AAGTCAATGG TTAC,

SEQ ID 7: GAAGCTATTG GTCACGTTCG,

SEQ ID 8: TGCCTGGATT GGCTTGATG T,

or the complementary sequence thereof.

5. (Original) Pair of oligonucleotides, for use as a set in the amplification of a target sequence located within the gene encoding the Nucleocapsid protein of the genome of SARS Coronavirus, said pair consisting of:

a first oligonucleotide being 10-50 nucleotides in length and comprising at least a fragment of 10 nucleotides of:

SEQ ID 14: TCAGCCCCAG ATGGTACTTC TATTACCTAG GAACTGGCCC  
AGAAGCTTCA CTT, or the complementary sequence thereof, and

a second oligonucleotide being 10-50 nucleotides in length and comprising at least a fragment of 10 nucleotides of: SEQ ID 17: AGGTTTACCC AATAATACTG CGTCTTGGTT  
CACAGCTCTC ACTCAGCATG GCAAGGAGGA ACTTAGATTG CCTCGAGGCC  
AGGGCGTTCC AATCAACACC AATAGTGGTC CAGATGACCA AAT, or the complementary sequence thereof.

6. (Original) Pair of oligonucleotides, according to claim 5, consisting essentially of:

a first oligonucleotide comprising at least a fragment of 10 nucleotides of a sequence selected from the group consisting of:

SEQ ID 15: TCAGCCCCAG ATGGTACTTC T,

SEQ ID 16: TAGGAACTGG CCCAGAAGCT TCACTT,

or the complementary sequence thereof, and

a second oligonucleotide comprising at least a fragment of 10 nucleotides of a sequence selected from the group consisting of:

SEQ ID 18: AGGTTTACCC AATAATACTG CGT,

SEQ ID 19: AGATTCCCTC GAGGCCAGGG CGT,

SEQ ID 20: ATAGTGGTCC AGATGACCAA AT,

or the complementary sequence thereof.

7. (Original) Pair of oligonucleotides, for use as a set in the amplification of a target sequence located within the gene encoding the Nucleocapsid protein of the genome of SARS Coronavirus, said pair consisting of:

a first oligonucleotide being 10-50 nucleotides in length and comprising at least a fragment of 10 nucleotides of: SEQ ID 23: TGCTCCAAGT GCCTCTGCAT TCTTGGAAAT GTCACGCATT GGCATGGAAG TCACACCTT, or the complementary sequence thereof, and

a second oligonucleotide being 10-50 nucleotides in length and comprising at least a fragment of 10 nucleotides of: SEQ ID 26: CCAAACGTGC ACTAAGAAAT CTGCTGCTGA GGCATCTAAA AAGCCTCGCC AAAAACGTAC TGCCACAAAA CAGTACAACG TCACTCAAGC ATTTGGGAGA CGTGGTCCAG AACAAACCCA AGGAAATT, or the complementary sequence thereof.

8. (Currently amended) Pair of oligonucleotides, according to claim 7, consisting essentially of:

a first oligonucleotide comprising at least a fragment of 10 nucleotides of a sequence selected from the group consisting of:

SEQ ID 24: TGCTCCA GTGCCTCTGC ATTCTT,

SEQ ID 25: TTGGCATGGA AGTCACACCT T, or the complementary sequence thereof, and

a second oligonucleotide comprising at least a fragment of 10 nucleotides of a sequence selected from the group consisting of:

SEQ ID 27: CCAAACGTGC ACTAAGAAAT CTGCT,

~~SEQ ID 28~~: CTCAAGCATT TGGGAGACGT GGT,  
SEQ ID 29 : CAGAACAAAC CCAAGGAAAT T,  
or the complementary sequence thereof.

9. (Original) Pair of oligonucleotides, for use as a set in the amplification of a target sequence located within the 3'-Non Coding Region (3'-NCR) of the genome of SARS Coronavirus, said pair consisting of:

a first oligonucleotide being 10-50 nucleotides in length and comprising at least a fragment of 10 nucleotides of: SEQ ID 31: TGCCTATATG GAAGAGCCCT AATGTGTAAA ATTAATTAA GTAGTGCTAT CCCCATGTGA TTTAATAGC TT, or the complementary sequence thereof, and

a second oligonucleotide being 10-50 nucleotides in length and comprising at least a fragment of 10 nucleotides of:

SEQ ID 34: TACGATACAT AGTCTACTCT TGTGCAGAAT GAATTCTCGT AACTAAACAG CACAAGTAGG TTTAGTTAAC TTTAATCTCA CATAGCAATC TTTAATCAAT GT, or the complementary sequence thereof.

10. (Original) Pair of oligonucleotides, according to claim 9, consisting essentially of:

a first oligonucleotide comprising at least a fragment of 10 nucleotides of a sequence selected from the group consisting of:

SEQ ID 32: TGCCTATATG GAAGAGCCC,

SEQ ID 33: TCCCCATGTG ATTTAATAG CTT,

or the complementary sequence thereof, and

a second oligonucleotide comprising at least a fragment of 10 nucleotides of a sequence selected from the group consisting of:

SEQ ID 35: TACGATACAT AGTCTACTCT TGT,

SEQ ID 36 : TAACTAAACA GCACAAGTAG GT,

SEQ ID 37: TAGCAATCTT TAATCAATGT,  
or the complementary sequence thereof.

11. (Currently Amended) Pair of oligonucleotides, according to ~~any of the claims 1-10~~claim 1, wherein the first oligonucleotide is provided with a promoter sequence recognized by a DNA dependent RNA polymerase.

12. (Original) Pair of oligonucleotides, according to claim 11, wherein the first oligonucleotide consists essentially of the sequence:

SEQ ID 9: aattctaata cgactcacta tagggAAGAT GTTTAAACTG GTCACCTGGT GGA,

SEQ ID 10: aattctaata cgactcacta tagggAACAT AACCAGTCGG TACAGCTACT A,

SEQ ID 11: aattctaata cgactcacta tagggAGAAA ATCCTAGCTG GAGAGGTA,

SEQ ID 39: aattctaata cgactcacta tagggAGAAG TACCATCTGG GGCTGA,

SEQ ID 40: aattctaata cgactcacta tagggAAGTG AAGCTTCTGG GCCAGTTCCCT A,

SEQ ID 41: aattctaata cgactcacta tagggAAGAA TGCAGAGGCA CTTGGAGCA,

SEQ ID 42: aattctaata cgactcacta tagggAAGGT GTGACTTCCA TGCCAA,

SEQ ID 43: aattctaata cgactcacta tagggGGGCT CTTCCATATA GGCA, or

SEQ ID 44: aattctaata cgactcacta tagggAAGCT ATTAAAATCA CATGGGGA.

13. (Currently Amended) Pair of oligonucleotides, according to ~~any of the claims 1-12~~claim 1, wherein each oligonucleotide being 15-30 nucleotides in length and comprising at least a fragment of 18 nucleotides, and preferably being 18-26 nucleotides in length and comprising at least a fragment of 20 nucleotides.

14. (Currently amended) Oligonucleotide, for use as a probe to detect the amplified nucleic acid sequence resulting in the amplification of a target sequence located within the genome of SARS Coronavirus, said amplification being based on pair of oligonucleotides

according to ~~any of claims 1-13~~claim 1, said probe being 10-50 nucleotides in length and comprising at least a fragment of 10 nucleotides of:

SEQ ID 12: GTTCGTGCGT GGATTGGCTT TGATGTAGAG GGCTGTCATG  
CAACTAGAGA TGCTGT,

SEQ ID 21: GGCTACTACC GAAGAGCTAC CCGACGAGTT CGTGGTGGTG  
ACGGCAAAAT GAAAGAGCTC AGCCCCAGAT GGTACTTCTA TTACCTAGGA  
ACTGGCCCAG AAGCTTCACT TCCCTACGGC GCTAACAAAG AAGGCATCGT  
ATGGGTTGCA ACTGAGGGAG CCTTGAATAC ACCCAAAGAC CACATTGGCA  
CCCGCAATCC TAATAACAAT GCTGCCACCG TGCTACAAC TCCCTCAAGGA  
ACAACATTGC CAAAAGGCTT CTACGCAGAG GGAAGCAGAG GCGGCAGTCA  
AGCCTCTTCT CGCTCCTCAT CACGTAGTCG CGGTAATTCA AGAAATTCAA  
CTCCTGGCAG CAGTAGGGGA AATTCTCCTG CTCGAATGGC TAGCGGAGGT  
GGTGAAACTG CCCTCGCGCT ATTGCTGCTA GACAGATTGA ACCAGCTTGA  
GAGCAAAGTT TCTGGTAAAG GCCAACACA ACAAGGCCAA ACTGTCACTA  
AGAAATCTGC TGCTGAGGCA TCTAAAAAGC CTCGCCAAAA ACGTACTGCC  
ACAAAACAGT ACAACGTCAC TCAAGCATT GGGAGACGTG GTCCAGAACAA  
AACCCAAGGA AATTCTGGGG ACCAAGACCT AATCAGACAA,

SEQ ID 38: GCCACCACAT TTTCATCGAG GC,

or the complementary sequence thereof, provided with a detectable label.

15. (Original) Oligonucleotide, according to claim 14, wherein the probe is constituted by a molecular beacon, preferably consisting of:

SEQ ID 13: 5'- [6-FAM]-ccatggCTGTCATGCAACTAGAGATGCTGTcccatgg- [DabSyl]-3',

SEQ ID 45: 5'- [6-FAM]-cgcgatGTTCGTGCCTGGATTGGCTTatcgcg- [DabCyl]-3',

SEQ ID 22: 5'-[6-FAM]-ccatggCTACTACCGAAGAGCTACCCGACGAcccatgg- [DabSyl]-3',

SEQ ID 30: 5'-[6-FAM]-ccatggACCAAGACCTAATCAGACAAccatgg- [DabSyl]-3',

SEQ ID 47: 5'-[6-FAM]-ccatgcGCCACCACATTTCATCGAgcatgg-[DabSyl]- 3'.

16. (Currently Amended) Use of an oligonucleotides' pair, according to ~~any of the claims 1-13~~claim 1, in a nucleic acid amplification reaction or as a probe for the detection of SARS Coronavirus nucleic acid in a sample.

17. (Currently Amended) Method for the detection of SARS nucleic acid in a sample wherein the sample is subjected to a nucleic acid amplification reaction using a pair of oligonucleotides according to ~~any of the claims 1-13~~claim 1 and suitable amplification reagents and the presence of any amplified nucleic acid is detected.

18. (Currently Amended) Method according to claim 17, wherein the detection of any amplified nucleic acid is carried out by reacting the sample with an oligonucleotide ~~according to claim 14 or 15~~probe, said probe being 10-50 nucleotides in length and comprising at least a fragment of 10 nucleotides of:

SEQ ID 12: GTTCGTGCGT GGATTGGCTT TGATGTAGAG GGCTGTCATG  
CAACTAGAGA TGCTGT,

SEQ ID 21: GGCTACTACC GAAGAGCTAC CCGACGAGTT CGTGGTGGTG  
ACGGCAAAAT GAAAGAGCTC AGCCCCAGAT GGTACTTCTA TTACCTAGGA  
ACTGGCCCAG AAGCTTCACT TCCCTACGGC GCTAACAAAG AAGGCATCGT  
ATGGGTTGCA ACTGAGGGAG CCTTGAATAC ACCCAAAGAC CACATTGGCA  
CCCGCAATCC TAATAACAAT GCTGCCACCG TGCTACAAC TCCCTCAAGGA  
ACAACATTGC CAAAAGGCTT CTACGCAGAG GGAAGCAGAG GCGGCAGTCA  
AGCCTCTTCT CGCTCCTCAT CACGTAGTCG CGGTAATTCA AGAAATTCAA  
CTCCTGGCAG CAGTAGGGGA AATTCTCCTG CTCGAATGGC TAGCGGAGGT  
GGTGAAACTG CCCTCGCGCT ATTGCTGCTA GACAGATTGA ACCAGCTTGA  
GAGCAAAGTT TCTGGTAAAG GCCAACACA ACAAGGCCAA ACTGTCACTA  
AGAAATCTGC TGCTGAGGCA TCTAAAAAGC CTCGCCAAAA ACGTACTGCC  
ACAAAACAGT ACAACGTAC TCAAGCATT GGGAGACGTG GTCCAGAACAA  
AACCCAAGGA AATTCGGGG ACCAAGACCT AATCAGACAA,

SEQ ID 38: GCCACCACAT TTTCATCGAG GC,

or the complementary sequence thereof, provided with a detectable label,

under suitable hybridization conditions and detecting the presence of the label in any hybrids formed between the amplified sequence and the probe.

19. (Original) Method according to claim 17, wherein the amplification technique used is a transcription based amplification technique, preferably the NASBA, and the first oligonucleotide is provided with a promoter sequence recognized by a DNA dependent RNA polymerase.

20. (Currently Amended) Test kit for the detection of SARS Coronavirus in a sample comprising:

a set of oligonucleotides according any of claims 1-13 to claim 1,

an oligonucleotide comprising a nucleic acid sequence substantially complementary to at least part of the amplified nucleic acid sequence, provided with a detectable label, according to claim 14 or 15 for use as a probe, said probe being 10-50 nucleotides in length and comprising at least a fragment of 10 nucleotides of:

SEQ ID 12: GTTCGTGCGT GGATTGGCTT TGATGTAGAG GGCTGTCATG  
CAACTAGAGA TGCTGT,

SEQ ID 21: GGCTACTACC GAAGAGCTAC CCGACGAGTT CGTGGTGGTG  
ACGGCAAAAT GAAAGAGCTC AGCCCCAGAT GGTACTTCTA TTACCTAGGA  
ACTGGCCCAG AAGCTTCACT TCCCTACGGC GCTAACAAAG AAGGCATCGT  
ATGGGTTGCA ACTGAGGGAG CCTTGAATAC ACCCAAAGAC CACATTGGCA  
CCCGCAATCC TAATAACAAT GCTGCCACCG TGCTACAAC TCCCTCAAGGA  
ACAACATTGC CAAAAGGCTT CTACGCAGAG GGAAGCAGAG GCGGCAGTCA  
AGCCTCTTCT CGCTCCTCAT CACGTAGTCG CGGTAATTCA AGAAATTCAA  
CTCCTGGCAG CAGTAGGGGA AATTCTCCTG CTCGAATGGC TAGCGGAGGT  
GGTGAAACTG CCCTCGCGCT ATTGCTGCTA GACAGATTGA ACCAGCTTGA

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GAGCAAAGTT TCTGGTAAAG GCCAACAAACA ACAAGGCCAA ACTGTCACTA  
AGAAAATCTGC TGCTGAGGCA TCTAAAAAGC CTCGCCAAAA ACGTACTGCC  
ACAAAACAGT ACAACGTCAC TCAAGCATT GGGAGACGTG GTCCAGAACAA  
AACCCAAGGA AATTCGGGG ACCAAGACCT AATCAGACAA,  
SEQ ID 38: GCCACCACAT TTTCATCGAG GC,  
or the complementary sequence thereof, and  
suitable amplification reagents.

21. (Original) Test kit according to claim 20, wherein suitable amplification reagents enable a transcription based amplification technique, preferably the NASBA.